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10/690,697

10/23/2003

Noriyasu Kuzuhara

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12/28/2005

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EXAMINER

SEFER, AHMED N

ART UNIT

PAPER NUMBER

2826

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,697

Applicant(s)

KUZUHARA ET AL



Examiner

A. Sefer

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/3/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30,37-40,43-46 and 48-54 is/are rejected.
- 7) ☒ Claim(s) 31-36,40-42,47,49-51 and 54-56 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed October 3, 2005 has been entered; no new claims have been introduced.

Priority

2. Submission of the translation of the foreign language application (JP 2000-220538) is acknowledged. Therefore, US PG-Pubs 2004/0245499 (Negoro et al.) is not available as a prior art.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 30, 37-39, 43 and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by Murayama et al. ("Murayama") US PG-Pub 2004/0233363.

Murayama discloses in fig. 15 an optical compensation film or a polarizing plate comprising a polarizing element 2 (as in claim 48); a support 3a and an optically anisotropic layer 4a, wherein the optically anisotropic layer is a layer on which orientation of a liquid crystalline compound is fixed (par. 0256), wherein the support is an optically biaxial cellulose ester film, and wherein the liquid crystalline compound is rod-shaped (par. 0178).

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Regarding claims 37 and 38, Murayama discloses (pars. 0247, 0248 and 0580) an orientation layer prepared by rubbing the surface of the support (as in claim 38) on which the liquid crystalline compound of optically anisotropic layer is oriented.

Regarding claim 39, Murayama discloses (par. 0247) an optical orientation layer.

Regarding claim 43, Murayama discloses (par. 0273) rod-shaped liquid crystalline compound exhibiting optically positive uniaxial properties.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murayama et al. ("Murayama") US PG-Pub 2004/0233363 in view of Okazaki et al. ("Okazaki") USPN 5,747,121.

Murayama discloses the device structure as recited in the claim, but lacks anticipation of dissolving-out blocking layer.

Okazaki discloses (see abstract) an optical compensation film comprising a dissolving-out blocking layer (polyvinyl alcohol).

Therefore, in view of Okazaki's teachings, one having an ordinary skill in the art at the time the invention was made would be motivated to modify Murayama's device by incorporating a dissolving-out blocking layer since that would increase bonding strength as taught by Okazaki.

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Regarding claims 44 and 46, the specification contains no disclosure of either the critical nature of the claimed arrangement or any unexpected results arising therefrom. Where patentability is said to be based upon particular chosen dimensions or upon another variable recited in a claim, the applicant must show that the chosen dimensions are critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

7. Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murayama in view of Miyachi et al. ("Miyachi") USPN 6,493,053.

Murayama discloses in fig. 15 a liquid crystal display comprising a first polarizing plate 2b, a liquid crystal cell 5a, and a second polarizing plate 2a provided at a side closer to a viewer side than the side of the first polarizing plate and the liquid crystal cell; an optical compensation film; a support 3a and an optically anisotropic layer 4a, wherein the optically anisotropic layer is a layer on which orientation of a liquid crystalline compound is fixed (par. 0256), wherein the support is an optically biaxial cellulose ester film, and wherein the liquid crystalline compound is rod-shaped (par. 0178); wherein the optical compensation film is provided between the first polarizing plate and the liquid crystal cell or between the second polarizing plate and the liquid crystal cell, but lacks anticipation of maximum index of refraction of the support.

Miyachi discloses (see col. 29, lines 53-59) a rubbing direction of a liquid crystal cell closer to an optical compensation film crosses orthogonally or almost orthogonally to a direction giving maximum index of the refraction of the support.

It would have been obvious incorporate Miyachi's teachings since that would provide an LCD with a high contrast as taught by Miyachi.

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8. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murayama in view of Aminaka et al. USPN 6,081,312 (“Aminaka”).

Murayama discloses in fig. 15 a liquid crystal display comprising a first polarizing plate 2b, a liquid crystal cell 5a, and a second polarizing plate 2a provided at a side closer to a viewer side than the side of the first polarizing plate and the liquid crystal cell; an optical compensation film; a support 3a and an optically anisotropic layer 4a, wherein the optically anisotropic layer is a layer on which orientation of a liquid crystalline compound is fixed (par. 0256), wherein the support is an optically biaxial cellulose ester film, and wherein the liquid crystalline compound is rod-shaped (par. 0178); wherein the optical compensation film is provided between the first polarizing plate and the liquid crystal cell or between the second polarizing plate and the liquid crystal cell, but lacks anticipation of a rubbing direction of the cell being parallel or almost parallel to a rubbing direction of an optical compensation film.

Aminaka discloses (see col. 8, lines 62-67) a rubbing direction of a liquid crystal cell closer to an optical compensation film being parallel to or almost parallel to a rubbing direction of an optical compensation film.

Therefore, it would have been obvious to incorporate Aminaka’s teachings since that would increase the viewing angle as taught by Aminaka.

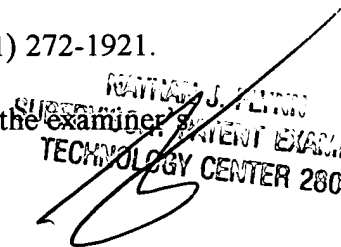
Allowable Subject Matter

14. Claims 31-36, 40-42, 47, 49-51 and 54-56 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (571) 272-1921.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915.


NATHAN J. FLYNN
SUPERVISOR
TECHNOLOGY CENTER 2800

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ANS
December 18, 2005